

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A device for regulating the temperature of individual sections of the interior of an aircraft comprising:

a controlled mixer valve for the mixing of engine bleed air with air cooler than the engine bleed air in order to obtain pre-tempered mixed air flowing out of the mixer valve;

a distribution line connected to the outlet of the mixer valve and connected with the individual sections by respective supply lines;

individual heating units assigned to respective individual sections and adapted to heat the pre-tempered mixed air flowing in the respective supply lines;

sensors assigned to the individual sections for sensing respective actual temperatures in the individual sections;

transmitters assigned to the individual sections for identifying respective nominal temperatures in the individual sections;

a regulator unit operatively connected to the heating units, the sensors, the transmitters, and the mixer valve, and which controls the mixer valve dependent upon the respective nominal temperatures and the respective actual temperatures of the individual sections such that the pre-tempered mixed air is of a temperature which corresponds to the lowest of the nominal temperatures of all of the individual sections, the regulator unit also controlling each of the heating units assigned to other individual sections with higher respective nominal

temperatures according to the difference between the identified nominal temperature and the sensed actual temperature of the respective individual section.

2. (Currently Amended) Device in accordance with claim 1,

characterized in that the heating units are disposed in the supply lines and are positioned adjacent to entrances to the respective individual sections.

3. (Previously Presented) Device in accordance with claim 1,

characterized in that the heating units are electric heating elements.

4. (Previously Presented) Device in accordance with claim 1,

characterized in that the sensors for the respective actual temperatures are positioned in the individual sections or in the supply lines downstream from the heating units.

5. (Previously Presented) Device in accordance with claim 1,

characterized in that the air which is cooler than the engine bleed air and supplied to the mixer valve comes out of a mixing chamber.

6. (Previously Presented) Device in accordance with claim 1,

characterized in that the regulator unit takes into consideration the nominal temperatures, the actual temperatures and characteristics of the respective individual sections for the control of the heating units.

7. (Previously Presented) Device in accordance with claim 1

characterized in that the transmitters, the sensors and the heating units are coupled to the regulator unit by at least one data bus.

8. (Previously Presented) Device in accordance with claim 1,

characterized in that the regulator unit has at least one centralized section temperature regulator and a decentralized heat regulator for each heating unit.

9. (Currently Amended) Process for regulating the temperature of individual sections of the interior of an aircraft comprising:

identifying respective actual temperatures and respective nominal temperatures of the individual sections;

mixing engine bleed air and air which is cooler than the engine bleed air in order to obtain pre-tempered mixed air at a temperature which corresponds to the lowest of the identified nominal temperatures;

distributing the pre-tempered mixed air to all of the individual sections; and

post-tempering the mixed air distributed to the individual sections with higher nominal temperatures than the lowest of the respective nominal temperatures, by heating the mixed air with individual heating units according to the differences between the respective nominal temperatures and the respective actual temperatures.

10. (Previously Presented) Process in accordance with claim 9, which takes into consideration the nominal temperatures, the actual temperatures, and respective individual section characteristics for post-tempering.

11. (Previously Presented) Process in accordance with claim 9, further comprising:

setting the nominal temperatures of the individual sections manually.

12. (Currently Amended) Device in accordance with claim 1 [[9]],

characterized in that the nominal temperatures of the respective individual sections is set manually.

13. (New) Process in accordance with claim 9,

characterized in that the pre-tempered mixed air is distributed to all of the individual sections by a distribution line connected with the individual sections by respective supply lines, the individual heating units being disposed in the respective supply lines.